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 NEWS  1           Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2           "Ask CAS" for self-help around the clock
 NEWS  3  SEP 09   CA/CAplus records now contain indexing from 1907 to the
                   present
 NEWS  4  AUG 05   New pricing for EUROPATFULL and PCTFULL effective
                   August 1, 2003
 NEWS  5  AUG 13   Field Availability (/FA) field enhanced in BEILSTEIN
 NEWS  6  AUG 18   Data available for download as a PDF in RDISCLOSURE
 NEWS  7  AUG 18   Simultaneous left and right truncation added to PASCAL
 NEWS  8  AUG 18   FROSTI and KOSMET enhanced with Simultaneous Left and Righ
                   Truncation
 NEWS  9  AUG 18   Simultaneous left and right truncation added to ANABSTR
 NEWS 10  SEP 22   DIPPR file reloaded
 NEWS 11  SEP 25   INPADOC: Legal Status data to be reloaded
 NEWS 12  SEP 29   DISSABS now available on STN
 NEWS 13  OCT 10   PCTFULL: Two new display fields added

 NEWS EXPRESS  OCTOBER 01 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
               MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
               AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003
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FILE 'HOME' ENTERED AT 14:41:25 ON 16 OCT 2003

=> file medline, uspatful, dgene, fsta, wpids
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                                                       ENTRY    SESSION
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FILE 'MEDLINE' ENTERED AT 14:42:02 ON 16 OCT 2003

FILE 'USPATFULL' ENTERED AT 14:42:02 ON 16 OCT 2003
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=> s antifungal peptide
L1 1180 ANTIFUNGAL PEPTIDE

=> s l1 and cyclic
L2 26 L1 AND CYCLIC

=> d l2 ti abs ibib tot

L2 ANSWER 1 OF 26 MEDLINE on STN
TI Purification and characterization of a novel **antifungal peptide** APS-1 produced by Bacillus cereus.
AB In previous study, we isolated an antagonist Bacillus cereus strain: S-1 from cotton plant. In field experiments, this bacterium was shown strong inhibition to several plant diseases. In this paper, we reported the purification of the antifungal substance produced by the bacterium and its properities. After the steps of acid precipitation, methanol and ethy lether extraction, Sephadex G100 and DEAE52 column chromatography, the antifungal material was purified. The purified material had absorption peak at 275 nm, and was exhibited negative in biuret color reaction. However after hydrolyzed with HCl, this substance shown positive in the same reaction. Amino acid analysis to the hydrolysate of APS-1 showed that APS-1 was composed of Glu, Asp, Tyr, Ser, Thr, Pro, Leu, Ile, Val and an unknown amino acid. Combining with its pratial resistance to proteinases, it was suggested that this antifungal material was a **cyclic** peptide. This peptide, named APS-1, with strong inhibition on the germination of spores of the phytopathogens tested, was shown high stability against ultraviolet radiation and heat. APS-1 may have potential role in plant diseases biological control.
ACCESSION NUMBER: 2003046692 IN-PROCESS
DOCUMENT NUMBER: 22443678 PubMed ID: 12555574
TITLE: Purification and characterization of a novel **antifungal peptide** APS-1 produced by Bacillus cereus.
AUTHOR: Pei Y; Li X; Peng H; Chen X; Liu J
CORPORATE SOURCE: Biotechnology Research Center, Southwest Agricultural University, Chongqing 400716.
SOURCE: WEI SHENG WU HSUEH PAO [ACTA MICROBIOLOGICA SINICA], (1999 Aug) 39 (4) 344-9.
Journal code: 21610860R. ISSN: 0001-6209.
PUB. COUNTRY: China
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Chinese
FILE SEGMENT: IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 20030131
Last Updated on STN: 20030131

L2 ANSWER 2 OF 26 MEDLINE on STN
TI Purification and characterization of **antifungal peptide** LP-1.
AB An **antifungal peptide** LP-1 from Bacillus subtilis TG26 strain was purified by acid precipitation, acetone precipitation and Hi-pore reversed phase column chromatography. The molecular weight of LP-1 is 1057.3 D as determined by MALDI-TOF mass spectrometry, and its pI is 4.75 by PAG-IEF. It was also found to be thermostable. Its antifungal

spectrum showed that LP-1 has strong inhibitory activity against many plant pathogenic fungi, such as Pythium aphanidermatum, Gibberella zeae, Alternaria longipe, Fusarium oxysporum f. lycopersici, etc.. The abnormal hyphal growth of Trichoderma viride caused by LP-1 such as swollen tips, twisted, short growth and cytoplasm condensation was also observed. Both ninhydrin reaction and peptide sequencing suggested that LP-1 is a **cyclic** peptide.

ACCESSION NUMBER: 2003046644 IN-PROCESS
DOCUMENT NUMBER: 22443630 PubMed ID: 12555526
TITLE: Purification and characterization of **antifungal peptide** LP-1.
AUTHOR: Liu Y; Xu Q; Chen Z
CORPORATE SOURCE: National Laboratory of Protein Engineering and Plant Genetic Engineering, Peking University, Beijing 100871.
SOURCE: WEI SHENG WU HSUEH PAO [ACTA MICROBIOLOGICA SINICA], (1999 Oct) 39 (5) 441-7.
Journal code: 21610860R. ISSN: 0001-6209.
PUB. COUNTRY: China
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Chinese
FILE SEGMENT: IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 20030131
Last Updated on STN: 20030131

L2 ANSWER 3 OF 26 MEDLINE on STN
TI Sequence specific stabilization of a linear analog of the antifungal lipopeptide iturin A2 by sodium during low energy electrospray ionization mass spectrometry conditions.
AB The structures and stability of sodiated species of 8-Beta, a linear lipopeptide analog (beta-aminotetradecanoyl-NYNQPNS) of the **antifungal peptide** iturin A2, were evaluated by electrospray ionization mass spectrometry (ESI-MS). Association of the lipopeptide, 8-Beta, with sodium afforded protection from fragmentation at high cone voltages and increasing collision energy conditions in the ESI-MS. The order of decreasing stability was found as 8-Beta 1Na > 8-Beta 2Na > 8-Beta 3Na > 8-Beta. Substantial differences were found between fragmentation patterns of the free and sodiated molecular species. Breakage of the N-terminal peptide bond of L-Pro generated the major product ions of the free 8-Beta parent ion. Impaired fragmentation of the sodium adducts of 8-Beta, indicated that this bond is protected by sodium complexation. Fragmentation patterns of the sodiated lipopeptide further revealed two specific binding sites for a nonsolvated sodium ion within the two type II beta-turn sequences (beta-aminotetradecanoyl-NYN and QPNS) of the natural iturin A2. It is proposed that specific interaction with sodium takes place with most of the peptide bond oxygens in these turns, and with the Gln sidechain. This interaction leads to stabilized structures in which the peptide backbone, specifically the peptide bonds in which L-Pro participates, is protected against low-energy fragmentation during ESI-MS.

ACCESSION NUMBER: 2001251691 MEDLINE
DOCUMENT NUMBER: 21247583 PubMed ID: 11349948
TITLE: Sequence specific stabilization of a linear analog of the antifungal lipopeptide iturin A2 by sodium during low energy electrospray ionization mass spectrometry conditions.
AUTHOR: Rautenbach M; Swart P; van der Merwe M J
CORPORATE SOURCE: Department of Biochemistry, University of Stellenbosch, Matieland, South Africa, Republic of South Africa,. mra@maties.sun.ac.za
SOURCE: JOURNAL OF THE AMERICAN SOCIETY FOR MASS SPECTROMETRY, (2001 May) 12 (5) 505-16.
Journal code: 9010412. ISSN: 1044-0305.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200105
ENTRY DATE: Entered STN: 20010604
Last Updated on STN: 20010604
Entered Medline: 20010531

L2 ANSWER 4 OF 26 USPATFULL on STN
TI Antifungal peptides and composition thereof
AB Antifungal peptides which comprise at least six amino acid residues identical to a run of amino acid residues found between position 21 and position 51 of the Rs-AFP2 antifungal protein sequence or of substantially homologous protein sequences. The peptides are useful for combating fungal diseases in agricultural, pharmaceutical or preservative applications.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2003:216221 USPATFULL
TITLE: Antifungal peptides and composition thereof
INVENTOR(S): Van Amerongen, Aart, Veenendaal, NETHERLANDS
Fant, Franky, Wetteren, BELGIUM
Borremans, Frans Alois, Destelbergen, BELGIUM
De Samblanx, Genoveva Wivina, Heverlee, BELGIUM
Sijtsma, Lolke, Renkum, NETHERLANDS
Meloen, Robbert Hans, Lelystad, NETHERLANDS
Puijk, Wouter Cornelis, Lelystad, NETHERLANDS
Schaaper, Wilhelmus Martinus Maria, Almere, NETHERLANDS
Broekaert, Willem Frans, Dilbeek, BELGIUM
van Gelder, Wilhelmus Martinus Josef, Zoetermeer, NETHERLANDS
Rees, Sarah Bronwen, Bracknell, UNITED KINGDOM
PATENT ASSIGNEE(S): Syngenta Limited, Guildford, UNITED KINGDOM (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6605698	B1	20030812	
	WO 9721815		19970619	
APPLICATION INFO.:	US 1998-77948		19980807	(9)
	WO 1996-GB3068		19961212	

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1995-25455	19951213
	GB 1996-6552	19960328

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Low, Christopher S. F.
ASSISTANT EXAMINER: Robinson, Hope A.
LEGAL REPRESENTATIVE: Hale & Dorr, Syngenta Limited
NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 43 Drawing Figure(s); 23 Drawing Page(s)
LINE COUNT: 1765
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 5 OF 26 USPATFULL on STN
TI Paenibacillus polymyxa strain ATCC 202127 for biocontrol of bacteria and fungi
AB Paenibacillus polymyxa strain ATCC 202127 capable of producing a peptide antibiotic against fungi, and specifically Leptosphaeria spp. is disclosed. Further, mutants of said strain capable of producing the peptide are also disclosed. In addition, a method of controlling a fungal disease of a crop is disclosed. The method comprises applying an

amount of the strain or mutants thereof to at least one of a medium for growing the crop, seeds of the crop prior to planting, and plants of the crop. The strain can also inhibit the growth of bacteria such as Micrococcus spp., Streptomyces spp. or Escherichia spp. The fungi which the strain or mutants thereof capable of producing the peptide are effective against include in addition to Leptosphaeria spp., the fungus selected from Sclerotinia spp., Rhizotonia spp., Pythium spp., Fusarium spp., Alternaria spp., Aspergillus spp., Sporobolomyces spp., Trichoderma spp., Penicillium spp. or Marasmius spp.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2003:209854 USPATFULL
TITLE:	Paenibacillus polymyxa strain ATCC 202127 for biocontrol of bacteria and fungi
INVENTOR(S):	Kharbanda, Prem Dutt, Edmonton, CANADA Coleman, Richard Nigel, Vegreville, CANADA Beatty, Perrin Hudson, Edmonton, CANADA Jensen, Susan Elaine, Edmonton, CANADA Tewari, Jalpa P., Edmonton, CANADA Yang, Jian, Edmonton, CANADA
PATENT ASSIGNEE(S):	The Governors of the University of Alberta, Edmonton, CANADA (non-U.S. corporation) Alberta Research Council, Edmonton, CANADA (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6602500	B1	20030805	
	WO 9959412		19991125	
APPLICATION INFO.:	US 2001-700486		20010205	(9)
	WO 1999-CA426		19990520	

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1998-2238289	19980520

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Naff, David M.
ASSISTANT EXAMINER:	Ware, Deborah K.
LEGAL REPRESENTATIVE:	Bennett Jones LLP
NUMBER OF CLAIMS:	16
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	15 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT:	2057

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 6 OF 26 USPATFULL on STN

TI Anti-fungal peptides

AB The present invention relates generally to anti-fungal peptides derived from or based on Domain III (amino acids 142-169) of bactericidal/permeability-increasing protein (BPI) and therapeutic uses of such peptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2002:149142 USPATFULL
TITLE:	Anti-fungal peptides
INVENTOR(S):	Little, Roger G., II, Benicia, CA, UNITED STATES Lim, Edward, Walnut Creek, CA, UNITED STATES Fadem, Mitchell B., Carmel Valley, CA, UNITED STATES
PATENT ASSIGNEE(S):	XOMA Corporation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002077298	A1	20020620

APPLICATION INFO.: US 2001-881490 A1 20010614 (9)
RELATED APPLN. INFO.: Continuation of Ser. No. US 1999-365539, filed on 2 Aug 1999, PENDING Continuation of Ser. No. US 1998-119858, filed on 21 Jul 1998, ABANDONED Continuation of Ser. No. US 1995-504841, filed on 20 Jul 1995, ABANDONED
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Janet M. McNicholas, Ph.D., McAndrews, Held & Malloy, Ltd., 500 W. Madison Street, 34th Floor, Chicago, IL, 60661
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Page(s)
LINE COUNT: 4025
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 7 OF 26 USPATFULL on STN
TI Compositions for treating biofilm
AB A composition for treating a biofilm comprises a first anchor enzyme component to degrade biofilm structures and a second anchor enzyme component having the capability to act directly upon the bacteria for a bactericidal effect.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2002:66609 USPATFULL
TITLE: Compositions for treating biofilm
INVENTOR(S): Budny, John A., Westlake Village, CA, UNITED STATES
Budny, Matthew J., Westlake Village, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002037260	A1	20020328
APPLICATION INFO.:	US 2001-876248	A1	20010606 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-587818, filed on 6 Jun 2000, PENDING Continuation-in-part of Ser. No. US 1999-249674, filed on 12 Feb 1999, GRANTED, Pat. No. US 6159447 Continuation-in-part of Ser. No. US 1997-951393, filed on 16 Oct 1997, GRANTED, Pat. No. US 5871714
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: COLIN P ABRAHAMS, 5850 CANOGA AVENUE, SUITE 400, WOODLAND HILLS, CA, 91367
NUMBER OF CLAIMS: 35
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Page(s)
LINE COUNT: 1056
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 8 OF 26 USPATFULL on STN
TI Small peptides with antipathogenic activity, treated plants and methods for treating same
AB The invention relates to two lipopeptides a1 and a2 produced by Bacillus subtilis and their use as an anitfungal agent against Aspergillus flavus. Both peptides are **cyclic**, acidic and have broad range of antifungal and antimicrobial activity. Both peptides belong to the Bacillomycin D family. A method and composition for controlling aflatoxin contamination in plants susceptible to alflatoxin-producing fungi, like Aspergillus flavus or Aspergillus parasiticus is also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2001:17984 USPATFULL
TITLE: Small peptides with antipathogenic activity, treated

plants and methods for treating same

INVENTOR(S): Moyne, Anne-Laure, Auburn, AL, United States
Cleveland, Thomas E., Mandeville, LA, United States
Tuzun, Sadik, Auburn, AL, United States

PATENT ASSIGNEE(S): USDA/ARS Southern Regional Research Center, New Orleans, LA, United States (U.S. corporation)
Auburn University, Auburn University, AL, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6183736	B1	20010206	
APPLICATION INFO.:	US 1999-287515		19990407	(9)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Lankford, Jr., Leon B.
ASSISTANT EXAMINER: Ware, Deborah K.
LEGAL REPRESENTATIVE: Schnader Harrison Segal & Lewis LLP
NUMBER OF CLAIMS: 29
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 727
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 9 OF 26 USPATFULL on STN
TI Anti-fungal peptides
AB The present invention relates generally to anti-fungal peptides derived from or based on Domain III (amino acids 142-169) of bactericidal/permeability-increasing protein (BPI) and in vivo or in vitro uses of such peptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2000:164486 USPATFULL
TITLE: Anti-fungal peptides
INVENTOR(S): Little, II, Roger G., Benicia, CA, United States
Lim, Edward, Walnut Creek, CA, United States
Fadem, Mitchell B., Berkeley, CA, United States
PATENT ASSIGNEE(S): Xoma Corporation, Berkeley, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6156730		20001205	
APPLICATION INFO.:	US 1999-227659		19990108	(9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1996-621259, filed on 21 Mar 1996, now patented, Pat. No. US 5858974 which is a continuation-in-part of Ser. No. US 1995-504841, filed on 20 Jul 1995, now abandoned which is a continuation-in-part of Ser. No. US 1995-372105, filed on 13 Jan 1995, now patented, Pat. No. US 5627153 which is a continuation-in-part of Ser. No. US 1994-306473, filed on 15 Sep 1994, now patented, Pat. No. US 5652332 And a continuation-in-part of Ser. No. US 1994-273540, filed on 11 Jul 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-209762, filed on 11 Mar 1994, now patented, Pat. No. US 5733872 which is a continuation-in-part of Ser. No. US 1994-183222, filed on 14 Jan 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-93202, filed on 15 Jul 1993, now abandoned which is a continuation-in-part of Ser. No. US 1993-30644, filed on 12 Mar 1993, now patented, Pat. No. US 5348942
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted

PRIMARY EXAMINER: Davenport, Avis M.
LEGAL REPRESENTATIVE: McAndrews, Held & Malloy, Ltd.
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 6157
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 10 OF 26 USPATFULL on STN
TI Synthetic antibiotics
AB Compositions of the current invention are directed toward inhibiting the growth of microorganisms, particularly fungi. The compositions consist of chemically-synthesized antibiotics comprising certain amino acids. Methods of identifying particular antibiotic compositions from libraries of such compositions are disclosed. In addition, methods for preventing microbial growth in plants and animals are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2000:12775 USPATFULL
TITLE: Synthetic antibiotics
INVENTOR(S): Edwards, David, San Antonio, TX, United States
PATENT ASSIGNEE(S): NCE Pharmaceuticals, Inc., San Antonio, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6020312		20000201
APPLICATION INFO.:	US 1996-767903		19961217 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-305768, filed on 13 Sep 1994, now patented, Pat. No. US 5602097 And Ser. No. WO 1995-US11724, filed on 13 Sep 1995
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Minnifield, Nita
LEGAL REPRESENTATIVE: Conley, Rose & Tayon, P.C., McDaniel, C. Steven, Corder, Timothy S.
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
LINE COUNT: 1930
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 11 OF 26 USPATFULL on STN
TI Synthetic antibiotics
AB Compositions of the current invention are directed toward inhibiting the growth of microorganisms, particularly fungi. The compositions consist of chemically-synthesized antibiotics comprising certain amino acids. Methods of identifying particular antibiotic compositions from libraries of such compositions are disclosed. In addition, methods for preventing microbial growth in plants and animals are disclosed. Methods and compositions are also disclosed which relate to synergistic combinations of inhibitory peptides with other antimicrobial compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 1999:36905 USPATFULL
TITLE: Synthetic antibiotics
INVENTOR(S): Edwards, David, San Antonio, TX, United States
PATENT ASSIGNEE(S): NCE Pharmaceuticals, Inc., San Antonio, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5885782		19990323
APPLICATION INFO.:	US 1997-871163		19970609 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1996-767903, filed

on 17 Dec 1996 And a continuation-in-part of Ser. No. US 1994-305768, filed on 13 Sep 1994, now patented, Pat. No. US 5602097

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Minnifield, Nita
LEGAL REPRESENTATIVE: Conley, Rose & Tayon, P.C., McDaniel, C. Steven, Corder, Timothy S.
NUMBER OF CLAIMS: 40
EXEMPLARY CLAIM: 1
LINE COUNT: 2268
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 12 OF 26 USPATFULL on STN
TI Anti-fungal peptides
AB The present invention relates generally to anti-fungal peptides derived from or based on Domain III (amino aids 142-169) of bactericidal/permeability-increasing protein (BPI) and in vivo or in vitro uses of such peptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 1999:4632 USPATFULL
TITLE: Anti-fungal peptides
INVENTOR(S): Little, II, Roger G., Benicia, CA, United States
Lim, Edward, Walnut Creek, CA, United States
Fadem, Mitchell B., Carmel Valley, CA, United States
PATENT ASSIGNEE(S): XOMA Corporation, Berkeley, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5858974		19990112
APPLICATION INFO.:	US 1996-621259		19960321 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-504841, filed on 20 Jul 1995
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Davenport, Avis M.
LEGAL REPRESENTATIVE: McAndrews, Held & Malloy, Ltd.
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 5315
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 13 OF 26 USPATFULL on STN
TI Synthetic antibiotics
AB Compositions of the current invention are directed toward inhibiting the growth of microorganisms, particularly fungi. The compositions consist of chemically-synthesized antibiotics comprising certain amino acids. Methods of identifying particular antibiotic compositions from libraries of such compositions are disclosed. In addition, methods for preventing microbial growth in plants and animals are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 97:12436 USPATFULL
TITLE: Synthetic antibiotics
INVENTOR(S): Edwards, David L., San Antonio, TX, United States
PATENT ASSIGNEE(S): Ceres Technologies, Inc., Houston, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5602097		19970211

APPLICATION INFO.: US 1994-305768 19940913 (8)
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Nucker, Christine M.
ASSISTANT EXAMINER: Prickril, Benet
LEGAL REPRESENTATIVE: C. Steven McDaniel, Conley, Rose & Tayon, P.C.Conley, Rose & Tayon, P.C.
NUMBER OF CLAIMS: 28
EXEMPLARY CLAIM: 1
LINE COUNT: 1747
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 14 OF 26 USPATFULL on STN
TI Reverse antimicrobial peptides
AB The present invention relates to several types of antimicrobial peptides including reverse antimicrobial peptides, antimicrobial oligopeptides and other antimicrobial compositions, such as cecropin P1. The present invention also relates to the use of these antimicrobial peptides to provide organisms, and, in particular, plants, with protection from microbial pathogens. Finally, the present invention relates to a screening method which may be useful for determining the phytotoxity of an antimicrobial peptide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 96:43765 USPATFULL
TITLE: Reverse antimicrobial peptides
INVENTOR(S): Mapelli, Claudio, Princeton, NJ, United States
Swerdloff, Michael D., Princeton, NJ, United States
Williams, Jon I., Robbinsville, NJ, United States
Everett, Nicholas P., Pennington City, NJ, United States
PATENT ASSIGNEE(S): Enichem S.p.A., Italy (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5519115		19960521
APPLICATION INFO.:	US 1993-164151		19931209 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1991-649784, filed on 1 Feb 1991, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Schain, Howard E.
ASSISTANT EXAMINER: Huff, Sheela J.
LEGAL REPRESENTATIVE: Lerner, David, Littenberg, Krumholz & Mentlik
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 4886
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 15 OF 26 DGENE COPYRIGHT 2003 THOMSON DERWENT on STN
TI Plant fungal disease control - using Bacillus subtilis SC-3 and cpds. produced by it
AN AAR33888 peptide DGENE
AB The **cyclic** peptide was produced by arerobically culturing Bacillus subtilis SC-3 (FERM P-11396). The peptide is an antifungal compound and is effective against various plant diseases caused by fungi.
ACCESSION NUMBER: AAR33888 peptide DGENE
TITLE: Plant fungal disease control - using Bacillus subtilis SC-3 and cpds. produced by it
PATENT ASSIGNEE: (SUMO)SUMITOMO CHEM CO LTD.
PATENT INFO: JP 05051305 A 19930302 9p
APPLICATION INFO: JP 1991-213564 19910826
PRIORITY INFO: JP 1991-213564 19910826

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
OTHER SOURCE: 1993-112700 [14]
DESCRIPTION: **Antifungal peptide** from Bacillus subtilis SC-3.

L2 ANSWER 16 OF 26 DGENE COPYRIGHT 2003 THOMSON DERWENT on STN
TI **Antifungal peptide**(s) showing potent antifungal property - prepd. by incubating Aureobasidium pullulanase, and centrifuging obtd. medium then extracting
AN AAR11325 Protein DGENE
AB This **antifungal peptide** is extracted from Aureobasidium pullulans R106. It is used for the treatment of fungal infections. It exhibits potent antifungal activity and causes less toxicity then conventional antifungal drugs. See AAR11318-24. See also J03044398. (Updated on 25-MAR-2003 to correct PA field.)
ACCESSION NUMBER: AAR11325 Protein DGENE
TITLE: **Antifungal peptide**(s) showing potent antifungal property - prepd. by incubating Aureobasidium pullulanase, and centrifuging obtd. medium then extracting
PATENT ASSIGNEE: (TAKI)TAKARA SHUZO CO LTD.
PATENT INFO: JP 03041093 A 19910221 8p
APPLICATION INFO: JP 1989-177662 19890710
PRIORITY INFO: JP 1989-177662 19890710
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
OTHER SOURCE: 1991-097747 [14]
DESCRIPTION: Example of **antifungal peptide**.

L2 ANSWER 17 OF 26 DGENE COPYRIGHT 2003 THOMSON DERWENT on STN
TI **Antifungal peptide**(s) showing potent antifungal property - prepd. by incubating Aureobasidium pullulanase, and centrifuging obtd. medium then extracting
AN AAR11324 Protein DGENE
AB This **antifungal peptide** is extracted from Aureobasidium pullulans R106. It is used for the treatment of fungal infections. It exhibits potent antifungal activity and causes less toxicity then conventional antifungal drugs. See AAR11318-23 and AAR11325. See also J03044398. (Updated on 25-MAR-2003 to correct PA field.)
ACCESSION NUMBER: AAR11324 Protein DGENE
TITLE: **Antifungal peptide**(s) showing potent antifungal property - prepd. by incubating Aureobasidium pullulanase, and centrifuging obtd. medium then extracting
PATENT ASSIGNEE: (TAKI)TAKARA SHUZO CO LTD.
PATENT INFO: JP 03041093 A 19910221 8p
APPLICATION INFO: JP 1989-177662 19890710
PRIORITY INFO: JP 1989-177662 19890710
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
OTHER SOURCE: 1991-097747 [14]
DESCRIPTION: Example of **antifungal peptide**.

L2 ANSWER 18 OF 26 DGENE COPYRIGHT 2003 THOMSON DERWENT on STN
TI **Antifungal peptide**(s) showing potent antifungal property - prepd. by incubating Aureobasidium pullulanase, and centrifuging obtd. medium then extracting
AN AAR11323 Protein DGENE
AB This **antifungal peptide** is extracted from Aureobasidium pullulans R106. It is used for the treatment of fungal infections. It exhibits potent antifungal activity and causes less toxicity then conventional antifungal drugs. See AAR11318-22 and AAR11324-25. See also J03044398. (Updated on 25-MAR-2003 to correct PA field.)

ACCESSION NUMBER: AAR11323 Protein DGENE
TITLE: **Antifungal peptide**(s) showing potent antifungal property - prepd. by incubating Aureobasidium pullulanase, and centrifuging obtd. medium then extracting
PATENT ASSIGNEE: (TAKI)TAKARA SHUZO CO LTD.
PATENT INFO: JP 03041093 A 19910221 8p
APPLICATION INFO: JP 1989-177662 19890710
PRIORITY INFO: JP 1989-177662 19890710
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
OTHER SOURCE: 1991-097747 [14]
DESCRIPTION: Example of **antifungal peptide**.

L2 ANSWER 19 OF 26 DGENE COPYRIGHT 2003 THOMSON DERWENT on STN
TI **Antifungal peptide**(s) showing potent antifungal property - prepd. by incubating Aureobasidium pullulanase, and centrifuging obtd. medium then extracting
AN AAR11322 Protein DGENE
AB This **antifungal peptide** is extracted from Aureobasidium pullulans R106. It is used for the treatment of fungal infections. It exhibits potent antifungal activity and causes less toxicity then conventional antifungal drugs. See AAR11318-21 and AAR11323-25. See also J03044398. (Updated on 25-MAR-2003 to correct PA field.)
ACCESSION NUMBER: AAR11322 Protein DGENE
TITLE: **Antifungal peptide**(s) showing potent antifungal property - prepd. by incubating Aureobasidium pullulanase, and centrifuging obtd. medium then extracting
PATENT ASSIGNEE: (TAKI)TAKARA SHUZO CO LTD.
PATENT INFO: JP 03041093 A 19910221 8p
APPLICATION INFO: JP 1989-177662 19890710
PRIORITY INFO: JP 1989-177662 19890710
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
OTHER SOURCE: 1991-097747 [14]
DESCRIPTION: Example of **antifungal peptide**.

L2 ANSWER 20 OF 26 DGENE COPYRIGHT 2003 THOMSON DERWENT on STN
TI **Antifungal peptide**(s) showing potent antifungal property - prepd. by incubating Aureobasidium pullulanase, and centrifuging obtd. medium then extracting
AN AAR11321 Protein DGENE
AB This **antifungal peptide** is extracted from Aureobasidium pullulans R106. It is used for the treatment of fungal infections. It exhibits potent antifungal activity and causes less toxicity then conventional antifungal drugs. See AAR11318-20 and AAR11322-25. See also J03044398. (Updated on 25-MAR-2003 to correct PA field.)
ACCESSION NUMBER: AAR11321 Protein DGENE
TITLE: **Antifungal peptide**(s) showing potent antifungal property - prepd. by incubating Aureobasidium pullulanase, and centrifuging obtd. medium then extracting
PATENT ASSIGNEE: (TAKI)TAKARA SHUZO CO LTD.
PATENT INFO: JP 03041093 A 19910221 8p
APPLICATION INFO: JP 1989-177662 19890710
PRIORITY INFO: JP 1989-177662 19890710
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
OTHER SOURCE: 1991-097747 [14]
DESCRIPTION: Example of **antifungal peptid** .

L2 ANSWER 21 OF 26 DGENE COPYRIGHT 2003 THOMSON DERWENT on STN
TI **Antifungal peptide**(s) showing potent antifungal property - prepd. by incubating Aureobasidium pullulanase, and

centrifuging obtd. medium then extracting
AN AAR11320 Protein DGENE
AB This **antifungal peptide** is extracted from Aureobasidium pullulans R106. It is used for the treatment of fungal infections. It exhibits potent antifungal activity and causes less toxicity then conventional antifungal drugs. See AAR11318-19 and AAR11321-25. See also J03044398. (Updated on 25-MAR-2003 to correct PA field.)
ACCESSION NUMBER: AAR11320 Protein DGENE
TITLE: **Antifungal peptide**(s) showing potent antifungal property - prepd. by incubating Aureobasidium pullulanase, and centrifuging obtd. medium then extracting
PATENT ASSIGNEE: (TAKI)TAKARA SHUZO CO LTD.
PATENT INFO: JP 03041093 A 19910221 8p
APPLICATION INFO: JP 1989-177662 19890710
PRIORITY INFO: JP 1989-177662 19890710
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
OTHER SOURCE: 1991-097747 [14]
DESCRIPTION: Example of **antifungal peptide**.

L2 ANSWER 22 OF 26 DGENE COPYRIGHT 2003 THOMSON DERWENT on STN
TI **Antifungal peptide**(s) showing potent antifungal property - prepd. by incubating Aureobasidium pullulanase, and centrifuging obtd. medium then extracting
AN AAR11319 Protein DGENE
AB This **antifungal peptide** is extracted from Aureobasidium pullulans R106. It is used for the treatment of fungal infections. It exhibits potent antifungal activity and causes less toxicity then conventional antifungal drugs. See AAR11318 and AAR11320-25. See also J03044398. (Updated on 25-MAR-2003 to correct PA field.)
ACCESSION NUMBER: AAR11319 Protein DGENE
TITLE: **Antifungal peptide**(s) showing potent antifungal property - prepd. by incubating Aureobasidium pullulanase, and centrifuging obtd. medium then extracting
PATENT ASSIGNEE: (TAKI)TAKARA SHUZO CO LTD.
PATENT INFO: JP 03041093 A 19910221 8p
APPLICATION INFO: JP 1989-177662 19890710
PRIORITY INFO: JP 1989-177662 19890710
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
OTHER SOURCE: 1991-097747 [14]
DESCRIPTION: Example of **antifungal peptide**.

L2 ANSWER 23 OF 26 DGENE COPYRIGHT 2003 THOMSON DERWENT on STN
TI **Antifungal peptide**(s) showing potent antifungal property - prepd. by incubating Aureobasidium pullulanase, and centrifuging obtd. medium then extracting
AN AAR11318 protein DGENE
AB This **antifungal peptide** is extracted from Aureobasidium pullulans R106. It is used for the treatment of fungal infections. It exhibits potent antifungal activity and causes less toxicity then conventional antifungal drugs. See AAR11319-25. See also J03044398. (Updated on 25-MAR-2003 to correct PA field.)
ACCESSION NUMBER: AAR11318 protein DGENE
TITLE: **Antifungal peptide**(s) showing potent antifungal property - prepd. by incubating Aureobasidium pullulanase, and centrifuging obtd. medium then extracting
PATENT ASSIGNEE: (TAKI)TAKARA SHUZO CO LTD.
PATENT INFO: JP 03041093 A 19910221 8p
APPLICATION INFO: JP 1989-177662 19890710
PRIORITY INFO: JP 1989-177662 19890710
DOCUMENT TYPE: Patent

LANGUAGE: Japanese
OTHER SOURCE: 1991-097747 [14]
DESCRIPTION: Generic sequence of **antifungal peptide**.

L2 ANSWER 24 OF 26 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
TI Macrocyclic oligosaccharide derivatives useful for analysis or diagnosis of e.g. an antibody comprises modified mono- or di-saccharide subunit(s) containing at least two chemically distinct sides and a central cavity.
AN 2003-120385 [11] WPIDS
AB WO 200277000 A UPAB: 20030214
NOVELTY - Macrocyclic oligosaccharide derivative comprises modified mono- or di-saccharide subunit(s) containing at least two chemically distinct sides and a central cavity. The subunit(s) are modified with least one side group on each side.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) A nanoscale assembly comprising the oligosaccharide macrocyclic derivatives;

(2) A pharmaceutical formulation comprising the nanoscale assembly; and

(3) The macrocyclic oligosaccharide derivative complexed with a guest molecule, within the central cavity of the macrocycle.

USE - For administration of therapeutic agents, and in the analysis or diagnosis (claimed) of peptide, antigen and antibody. Also useful as a radiation sensitiser e.g. porphyrin.

ADVANTAGE - The macrocyclic oligosaccharides are capable of forming aggregates by self-assembly, by allowing continuous molecule stacking of the macrocycle by attraction between the side groups in the separate macrocycles. The assembly has the ability to encapsulate guest molecules such as therapeutic drugs and can be used as hosts for the solubilization of various compounds. The complex forms smaller particles, which are easily absorbed. The complex also provides a sustained release of molecule is via osmotic pumps, in which the oligosaccharides act as an osmotic driving agent providing potential for the influx of water.

Dwg.0/5

ACCESSION NUMBER: 2003-120385 [11] WPIDS
DOC. NO. CPI: C2003-030980
TITLE: Macrocyclic oligosaccharide derivatives useful for analysis or diagnosis of e.g. an antibody comprises modified mono- or di-saccharide subunit(s) containing at least two chemically distinct sides and a central cavity.
DERWENT CLASS: A96 B02 B04 B07 D16
INVENTOR(S): DARCY, R; RAVOO, B J
PATENT ASSIGNEE(S): (UYDU-N) UNIV COLLEGE DUBLIN
COUNTRY COUNT: 100
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002077000	A2	20021003	(200311)*	EN	32

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002077000	A2	WO 2002-IE38	20020325

PRIORITY APPLN. INFO: IE 2001-293 20010323

L2 ANSWER 25 OF 26 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
TI Novel lipopeptides produced by Bacillus subtilis useful as antifungal, antibacterial agents for protecting plant or mammals from fungal, especially Aspergillus flavus or microbial infections.
AN 2001-190938 [19] WPIDS
AB US 6183736 B UPAB: 20010405
NOVELTY - An isolated antifungal Bacillus subtilis PTA-1767 peptide (I), where the peptide is a **cyclic** peptide selected from a1 and a2, comprising a beta -amino fatty acid and having antifungal activity against Aspergillus flavus, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a biologically pure culture of B. subtilis identified as strain PTA-1767;

(2) a composition (II) effective to control A. flavus, which comprises an active component including B. subtilis PTA-1767 or its extract, where the active component comprises a1 or a2; and

(3) a plant (III) treated with (II) which is susceptible to an aflatoxin-generating pathogen.

ACTIVITY - Antibiotic; antifungal.

Crude fraction of Bacillus subtilis AU195 culture was extracted and protein secreted in the culture filtrate was precipitated with 20 % ammonium sulfate. Both **antifungal peptide** a1 and a2 were present in the crude fraction in a mixture of 50/50. Antifungal activity of the fraction was carried out under sterile conditions using disc plate diffusion assay. Mycelium plugs from actively growing cultures were placed in the center of a petri plate containing potato dextrose agar (PDA) for Alternaria solani, Fusarium monoliforme and Pythium aphanidermatum. After incubation at 27 deg. C to allow vegetative growth, samples were applied on sterile filter paper disc laid on the agar surface. The crude fraction inhibited hyphal growth of Alternaria solani, Fusarium monoliforme and Pythium aphanidermatum effectively.

MECHANISM OF ACTION - Inhibitor of target fungi or bacteria.

USE - (I) is useful for controlling aflatoxin contamination in plants susceptible to aflatoxin-producing fungi and for protecting plants from pathogens. (I) is useful for controlling fungi including Aspergillus flavus, Alternaria solani, Fusarium monoliforme, Aspergillus parasiticus and Pythium aphanidermatum and bacterial plant pathogens Clavibacter michiganensis, Xanthomonas campestris and B. cereus and B. subtilis PTA-1767, by exposing a target plant to (I). (II) is useful for treating plants which are susceptible to an aflatoxin-generating pathogen, including cereals, legumes, tubers, solanaccous plants, curcurbits or fibrous plants, preferably peanut, cotton, corn or soybean. (All claimed). (I) can also be used to treat any mammal, especially animals susceptible to A. flavus and/or A. parasiticus. The peptides are useful for prophylactic control and/or therapeutic control.

ADVANTAGE - (I) is thermostable and resistant to lipase treatment (claimed).

Dwg.0/8

ACCESSION NUMBER: 2001-190938 [19] WPIDS
DOC. NO. CPI: C2001-057050
TITLE: Novel lipopeptides produced by Bacillus subtilis useful as antifungal, antibacterial agents for protecting plant or mammals from fungal, especially Aspergillus flavus or microbial infections.
DERWENT CLASS: C05 C06 D16
INVENTOR(S): CLEVELAND, T E; MOYNE, A; TUZUN, S
PATENT ASSIGNEE(S): (AUBU) UNIV AUBURN; (USDA-N) USDA/ARS SOUTHERN REGIONAL RES CENT
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 6183736	B1	20010206	(200119)*		16

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
US 6183736	B1	Provisional	US 1998-80879P	19980407
		Provisional	US 1998-87535P	19980601
			US 1999-287515	19990407

PRIORITY APPLN. INFO: US 1999-287515 19990407; US 1998-80879P 19980407; US 1998-87535P 19980601

L2 ANSWER 26 OF 26 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

TI Novel anti-fungal peptides derived from domain III of bactericidal/permeability-increasing protein useful for killing or inhibiting replication of fungi and for treating fungal infections.

AN 2001-090160 [10] WPIDS

CR 1994-302679 [37]; 1994-302964 [37]; 1995-263713 [34]; 1995-263714 [34]; 1995-263828 [34]; 1996-179900 [18]; 1997-020443 [02]; 1997-132578 [12]; 1998-427075 [36]; 1999-119956 [10]; 2000-338505 [28]

AB US 6156730 A UPAB: 20010220

NOVELTY - An **antifungal peptide** (I) derived from domain III of bactericidal/permeability-increasing protein (BPI) having from 7-12 amino acids comprising a core sequence of amino acids of LIQL, LQLF, WLIQL, LIQLF and WLIQLF, and one or more cationic amino acids of K, R, H ornithine and diaminobutyric acid at the amino and/or carboxy terminal portion of the core sequence, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a **cyclic** peptide as described above; and

(2) a pharmaceutical composition comprising (I) and a pharmaceutically acceptable diluent, adjuvant or carrier.

ACTIVITY - Antifungal.

The antifungal activity of the peptides was tested in vitro. Domain III derived peptides were tested for their fungicidal activity on amphotericin resistant Candida. Resistant colonies of Candida designated SLU-2A though SLU-2K were isolated using a gradient plate technique. For the radial diffusion assays, Candida albicans SLU-1 were grown and SLU-2G were grown overnight in Sabouraud dextrose broth supplemented with 10 mu g/ml amphotericin B and 5 mu g/ml cefiriaxone at 37 deg. C. Cultures were diluted and allowed to grow for 5 hours at 37 deg. C. Cells were then pelleted and added to 10 ml of molten, cooled 45 deg. C underlayer agarose and wells were cut. Peptides were two-fold serially diluted with Dulbecco's PBS (D-PBS), Amphotericin B and nystatin were similarly diluted. 5 mu L were added per well and allowed to diffuse at 37 deg. C for 1.5-2 hours. Then 10 ml of molten overlayer agarose were added and the plates were incubated inverted at 37 deg. C overnight. Plates were stained with dilute Coomassie solution, inhibition zones were measured, then converted to pmol values by PROBrIT analysis. The results demonstrated fungicidal activity against both the SLU-1 wild type strain and the SLU-2G amphotericin B-resistant strain, with better activity demonstrated against the SLU-2G amphotericin B resistant strain. In contrast, amphotericin B was effective against the original SLU-1 strain but did not kill the SLU-2G resistant cells. These results demonstrate that novel domain III derived peptides are effective fungicidal agents by a mechanism different from that of amphotericin B.

MECHANISM OF ACTION - Fungi replication inhibitor.

USE - (I) is useful for killing or inhibiting replication of fungi in vitro which involves contacting the fungi with (I) and for treating

infections caused by fungus belonging to Candida, Aspergillus, Cryptococcus species such as C.albicans, C.glabrata, C.krusei, C.lusitaniae, C.parapsilosis and C.tropicalis (claimed). Domain III derived peptides have fungicidal/fungistatic agents and also have LPS-neutralizing activity. Administration of domain III derived peptides enhance the effect of antifungal agents or reverses resistance of fungi to such agents. Killing or inhibiting growth of fungi by the domain III derived peptides is useful in vivo or in vitro in food preparation or to decontaminate fluids and surfaces or to sterilize surgical and other medical equipment and implantable devices, including prosthetic joints. They are also useful for in situ sterilization of in-dwelling invasive devices such as intravenous lines and catheters.

ADVANTAGE - The domain III derived peptides provide improved survival or reduction of colony forming unit in circulation after fungal challenge. In adjunctive therapy, the administration of domain III derived peptides reduces the amount of antifungal agent need for effective therapy, thus limiting potential toxic response and/or high cost of treatment. Concurrent administration of domain III derived peptides and another antifungal agent produces a more rapid and complete fungicidal/fungistatic agent. The peptides are useful for treating the incurable Candida infections and for treating fungi that are acquired resistance to known antifungal agents. It also provides quality of life benefits due to e.g. decreased duration of therapy, reduced stay in intensive care units or reduced stay overall in the hospital, with the concomitant reduced risk of serious nosocomial infections.

Dwg.0/9

ACCESSION NUMBER: 2001-090160 [10] WPIDS

CROSS REFERENCE: 1994-302679 [37]; 1994-302964 [37]; 1995-263713 [34]; 1995-263714 [34]; 1995-263828 [34]; 1996-179900 [18]; 1997-020443 [02]; 1997-132578 [12]; 1998-427075 [36]; 1999-119956 [10]; 2000-338505 [28]

DOC. NO. CPI: C2001-026312

TITLE: Novel anti-fungal peptides derived from domain III of bactericidal/permeability-increasing protein useful for killing or inhibiting replication of fungi and for treating fungal infections.

DERWENT CLASS: B04 C03

INVENTOR(S): FADEM, M B; LIM, E; LITTLE, R G

PATENT ASSIGNEE(S): (XOMA) XOMA CORP

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 6156730	A	20001205	(200110)*		134

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
US 6156730	A	CIP of	US 1993-30644	19930312
		CIP of	US 1993-93202	19930715
		CIP of	US 1994-183222	19940114
		CIP of	US 1994-209762	19940311
		CIP of	US 1994-273540	19940711
		CIP of	US 1994-306473	19940915
		CIP of	US 1995-372105	19950113
		CIP of	US 1995-504841	19950720
		Cont of	US 1996-621259	19960321
			US 1999-227659	19990108

FILING DETAILS:

PATENT NO	KIND	PATENT NO

US 6156730	A	CIP of	US 5348942
		CIP of	US 5627153
		CIP of	US 5652332
		CIP of	US 5733872
		Cont of	US 5858974

PRIORITY APPLN. INFO: US 1996-621259 19960321; US 1993-30644 19930312; US 1993-93202 19930715; US 1994-183222 19940114; US 1994-209762 19940311; US 1994-273540 19940711; US 1994-306473 19940915; US 1995-372105 19950113; US 1995-504841 19950720; US 1999-227659 19990108

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=> s aspergillus
L3         92928 ASPERGILLUS

=> d his

     (FILE 'HOME' ENTERED AT 14:41:25 ON 16 OCT 2003)

     FILE 'MEDLINE, USPATFULL, DGENE, FSTA, WPIDS' ENTERED AT 14:42:02 ON 16
     OCT 2003
L1          1180 S ANTIFUNGAL PEPTIDE
L2            26 S L1 AND CYCLIC
L3         92928 S ASPERGILLUS

=> s l1 and l3
L4           780 L1 AND L3

=> s cryptococcus
L5         26824 CRYPTOCOCCUS

=> s l5 and l4
L6           710 L5 AND L4

=> s l1 and l6
L7           710 L1 AND L6

=> s l2 and l7
L8             7 L2 AND L7

=> d l8 ti abs ibib tot

L8   ANSWER 1 OF 7  USPATFULL on STN
TI     Anti-fungal peptides
AB     The present invention relates generally to anti-fungal peptides derived
       from or based on Domain III (amino acids 142-169) of
       bactericidal/permeability-increasing protein (BPI) and therapeutic uses
       of such peptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER:         2002:149142  USPATFULL
TITLE:                    Anti-fungal peptides
INVENTOR(S):              Little, Roger G., II, Benicia, CA, UNITED STATES
                          Lim, Edward, Walnut Creek, CA, UNITED STATES
                          Fadem, Mitchell B., Carmel Valley, CA, UNITED STATES
PATENT ASSIGNEE(S):       XOMA Corporation (U.S. corporation)

                               NUMBER         KIND    DATE
                          ---------------- ------ --------
PATENT INFORMATION:       US 2002077298      A1   20020620
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APPLICATION INFO.: US 2001-881490 A1 20010614 (9)
RELATED APPLN. INFO.: Continuation of Ser. No. US 1999-365539, filed on 2 Aug 1999, PENDING Continuation of Ser. No. US 1998-119858, filed on 21 Jul 1998, ABANDONED Continuation of Ser. No. US 1995-504841, filed on 20 Jul 1995, ABANDONED
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Janet M. McNicholas, Ph.D., McAndrews, Held & Malloy, Ltd., 500 W. Madison Street, 34th Floor, Chicago, IL, 60661
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Page(s)
LINE COUNT: 4025
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 2 OF 7 USPATFULL on STN
TI Anti-fungal peptides
AB The present invention relates generally to anti-fungal peptides derived from or based on Domain III (amino acids 142-169) of bactericidal/permeability-increasing protein (BPI) and in vivo or in vitro uses of such peptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2000:164486 USPATFULL
TITLE: Anti-fungal peptides
INVENTOR(S): Little, II, Roger G., Benicia, CA, United States
Lim, Edward, Walnut Creek, CA, United States
Fadem, Mitchell B., Berkeley, CA, United States
PATENT ASSIGNEE(S): Xoma Corporation, Berkeley, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6156730		20001205
APPLICATION INFO.:	US 1999-227659		19990108 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1996-621259, filed on 21 Mar 1996, now patented, Pat. No. US 5858974 which is a continuation-in-part of Ser. No. US 1995-504841, filed on 20 Jul 1995, now abandoned which is a continuation-in-part of Ser. No. US 1995-372105, filed on 13 Jan 1995, now patented, Pat. No. US 5627153 which is a continuation-in-part of Ser. No. US 1994-306473, filed on 15 Sep 1994, now patented, Pat. No. US 5652332 And a continuation-in-part of Ser. No. US 1994-273540, filed on 11 Jul 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-209762, filed on 11 Mar 1994, now patented, Pat. No. US 5733872 which is a continuation-in-part of Ser. No. US 1994-183222, filed on 14 Jan 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-93202, filed on 15 Jul 1993, now abandoned which is a continuation-in-part of Ser. No. US 1993-30644, filed on 12 Mar 1993, now patented, Pat. No. US 5348942
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Davenport, Avis M.
LEGAL REPRESENTATIVE: McAndrews, Held & Malloy, Ltd.
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 6157
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 3 OF 7 USPATFULL on STN
TI Synthetic antibiotics
AB Compositions of the current invention are directed toward inhibiting the growth of microorganisms, particularly fungi. The compositions consist of chemically-synthesized antibiotics comprising certain amino acids. Methods of identifying particular antibiotic compositions from libraries of such compositions are disclosed. In addition, methods for preventing microbial growth in plants and animals are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2000:12775 USPATFULL
TITLE:	Synthetic antibiotics
INVENTOR(S):	Edwards, David, San Antonio, TX, United States
PATENT ASSIGNEE(S):	NCE Pharmaceuticals, Inc., San Antonio, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6020312		20000201
APPLICATION INFO.:	US 1996-767903		19961217 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1994-305768, filed on 13 Sep 1994, now patented, Pat. No. US 5602097 And Ser. No. WO 1995-US11724, filed on 13 Sep 1995		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Minnifield, Nita		
LEGAL REPRESENTATIVE:	Conley, Rose & Tayon, P.C., McDaniel, C. Steven, Corder, Timothy S.		
NUMBER OF CLAIMS:	17		
EXEMPLARY CLAIM:	1		
LINE COUNT:	1930		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 4 OF 7 USPATFULL on STN
TI Synthetic antibiotics
AB Compositions of the current invention are directed toward inhibiting the growth of microorganisms, particularly fungi. The compositions consist of chemically-synthesized antibiotics comprising certain amino acids. Methods of identifying particular antibiotic compositions from libraries of such compositions are disclosed. In addition, methods for preventing microbial growth in plants and animals are disclosed. Methods and compositions are also disclosed which relate to synergistic combinations of inhibitory peptides with other antimicrobial compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	1999:36905 USPATFULL
TITLE:	Synthetic antibiotics
INVENTOR(S):	Edwards, David, San Antonio, TX, United States
PATENT ASSIGNEE(S):	NCE Pharmaceuticals, Inc., San Antonio, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5885782		19990323
APPLICATION INFO.:	US 1997-871163		19970609 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1996-767903, filed on 17 Dec 1996 And a continuation-in-part of Ser. No. US 1994-305768, filed on 13 Sep 1994, now patented, Pat. No. US 5602097		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Minnifield, Nita		
LEGAL REPRESENTATIVE:	Conley, Rose & Tayon, P.C., McDaniel, C. Steven, Corder, Timothy S.		

NUMBER OF CLAIMS: 40
EXEMPLARY CLAIM: 1
LINE COUNT: 2268
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 5 OF 7 USPATFULL on STN
TI Anti-fungal peptides
AB The present invention relates generally to anti-fungal peptides derived from or based on Domain III (amino aids 142-169) of bactericidal/permeability-increasing protein (BPI) and in vivo or in vitro uses of such peptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 1999:4632 USPATFULL
TITLE: Anti-fungal peptides
INVENTOR(S): Little, II, Roger G., Benicia, CA, United States
Lim, Edward, Walnut Creek, CA, United States
Fadem, Mitchell B., Carmel Valley, CA, United States
PATENT ASSIGNEE(S): XOMA Corporation, Berkeley, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5858974		19990112
APPLICATION INFO.:	US 1996-621259		19960321 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-504841, filed on 20 Jul 1995
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Davenport, Avis M.
LEGAL REPRESENTATIVE: McAndrews, Held & Malloy, Ltd.
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 5315
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 6 OF 7 USPATFULL on STN
TI Synthetic antibiotics
AB Compositions of the current invention are directed toward inhibiting the growth of microorganisms, particularly fungi. The compositions consist of chemically-synthesized antibiotics comprising certain amino acids. Methods of identifying particular antibiotic compositions from libraries of such compositions are disclosed. In addition, methods for preventing microbial growth in plants and animals are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 97:12436 USPATFULL
TITLE: Synthetic antibiotics
INVENTOR(S): Edwards, David L., San Antonio, TX, United States
PATENT ASSIGNEE(S): Ceres Technologies, Inc., Houston, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5602097		19970211
APPLICATION INFO.:	US 1994-305768		19940913 (8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Nucker, Christine M.
ASSISTANT EXAMINER: Prickril, Benet
LEGAL REPRESENTATIVE: C. Steven McDaniel, Conley, Rose & Tayon, P.C.Conley, Rose & Tayon, P.C.
NUMBER OF CLAIMS: 28

EXEMPLARY CLAIM: 1
LINE COUNT: 1747
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 7 OF 7 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
TI Novel anti-fungal peptides derived from domain III of bactericidal/permeability-increasing protein useful for killing or inhibiting replication of fungi and for treating fungal infections.
AN 2001-090160 [10] WPIDS
CR 1994-302679 [37]; 1994-302964 [37]; 1995-263713 [34]; 1995-263714 [34]; 1995-263828 [34]; 1996-179900 [18]; 1997-020443 [02]; 1997-132578 [12]; 1998-427075 [36]; 1999-119956 [10]; 2000-338505 [28]
AB US 6156730 A UPAB: 20010220
NOVELTY - An **antifungal peptide** (I) derived from domain III of bactericidal/permeability-increasing protein (BPI) having from 7-12 amino acids comprising a core sequence of amino acids of LIQL, LQLF, WLIQL, LIQLF and WLIQLF, and one or more cationic amino acids of K, R, H ornithine and diaminobutyric acid at the amino and/or carboxy terminal portion of the core sequence, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a **cyclic** peptide as described above; and

(2) a pharmaceutical composition comprising (I) and a pharmaceutically acceptable diluent, adjuvant or carrier.

ACTIVITY - Antifungal.

The antifungal activity of the peptides was tested in vitro. Domain III derived peptides were tested for their fungicidal activity on amphotericin resistant Candida. Resistant colonies of Candida designated SLU-2A though SLU-2K were isolated using a gradient plate technique. For the radial diffusion assays, Candida albicans SLU-1 were grown and SLU-2G were grown overnight in Sabouraud dextrose broth supplemented with 10 mu g/ml amphotericin B and 5 mu g/ml cefiriaxone at 37 deg. C. Cultures were diluted and allowed to grow for 5 hours at 37 deg. C. Cells were then pelleted and added to 10 ml of molten, cooled 45 deg. C underlayer agarose and wells were cut. Peptides were two-fold serially diluted with Dulbecco's PBS (D-PBS), Amphotericin B and nystatin were similarly diluted. 5 mu L were added per well and allowed to diffuse at 37 deg. C for 1.5-2 hours. Then 10 ml of molten overlayer agarose were added and the plates were incubated inverted at 37 deg. C overnight. Plates were stained with dilute Coomassie solution, inhibition zones were measured, then converted to pmol values by PROBrIT analysis. The results demonstrated fungicidal activity against both the SLU-1 wild type strain and the SLU-2G amphotericin B-resistant strain, with better activity demonstrated against the SLU-2G amphotericin B resistant strain. In contrast, amphotericin B was effective against the original SLU-1 strain but did not kill the SLU-2G resistant cells. These results demonstrate that novel domain III derived peptides are effective fungicidal agents by a mechanism different from that of amphotericin B.

MECHANISM OF ACTION - Fungi replication inhibitor.

USE - (I) is useful for killing or inhibiting replication of fungi in vitro which involves contacting the fungi with (I) and for treating infections caused by fungus belonging to Candida, **Aspergillus**, **Cryptococcus** species such as C.albicans, C.glabrata, C.krusei, C.lusitaniae, C.parapsilosis and C.tropicalis (claimed). Domain III derived peptides have fungicidal/fungistatic agents and also have LPS-neutralizing activity. Administration of domain III derived peptides enhance the effect of antifungal agents or reverses resistance of fungi to such agents. Killing or inhibiting growth of fungi by the domain III derived peptides is useful in vivo or in vitro in food preparation or to decontaminate fluids and surfaces or to sterilize surgical and other medical equipment and implantable devices, including prosthetic joints. They are also useful for in situ sterilization of in-dwelling invasive devices such as intravenous lines and catheters.

ADVANTAGE - The domain III derived peptides provide improved survival

or reduction of colony forming unit in circulation after fungal challenge. In adjunctive therapy, the administration of domain III derived peptides reduces the amount of antifungal agent need for effective therapy, thus limiting potential toxic response and/or high cost of treatment. Concurrent administration of domain III derived peptides and another antifungal agent produces a more rapid and complete fungicidal/fungistatic agent. The peptides are useful for treating the incurable Candida infections and for treating fungi that are acquired resistance to known antifungal agents. It also provides quality of life benefits due to e.g. decreased duration of therapy, reduced stay in intensive care units or reduced stay overall in the hospital, with the concomitant reduced risk of serious nosocomial infections.

Dwg.0/9

ACCESSION NUMBER: 2001-090160 [10] WPIDS

CROSS REFERENCE: 1994-302679 [37]; 1994-302964 [37]; 1995-263713 [34]; 1995-263714 [34]; 1995-263828 [34]; 1996-179900 [18]; 1997-020443 [02]; 1997-132578 [12]; 1998-427075 [36]; 1999-119956 [10]; 2000-338505 [28]

DOC. NO. CPI: C2001-026312

TITLE: Novel anti-fungal peptides derived from domain III of bactericidal/permeability-increasing protein useful for killing or inhibiting replication of fungi and for treating fungal infections.

DERWENT CLASS: B04 C03

INVENTOR(S): FADEM, M B; LIM, E; LITTLE, R G

PATENT ASSIGNEE(S): (XOMA) XOMA CORP

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 6156730	A	20001205	(200110)*		134

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
US 6156730	A	CIP of	US 1993-30644	19930312
		CIP of	US 1993-93202	19930715
		CIP of	US 1994-183222	19940114
		CIP of	US 1994-209762	19940311
		CIP of	US 1994-273540	19940711
		CIP of	US 1994-306473	19940915
		CIP of	US 1995-372105	19950113
		CIP of	US 1995-504841	19950720
		Cont of	US 1996-621259	19960321
			US 1999-227659	19990108

FILING DETAILS:

PATENT NO	KIND		PATENT NO
US 6156730	A	CIP of	US 5348942
		CIP of	US 5627153
		CIP of	US 5652332
		CIP of	US 5733872
		Cont of	US 5858974

PRIORITY APPLN. INFO: US 1996-621259 19960321; US 1993-30644 19930312; US 1993-93202 19930715; US 1994-183222 19940114; US 1994-209762 19940311; US 1994-273540 19940711; US 1994-306473 19940915; US 1995-372105 19950113; US 1995-504841 19950720; US

1999-227659 19990108